

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1033356

Luminaire Tested: S124DIW-B1195D770UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033356
REPORT IS A COMBINATION OF REPORTS P997217 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

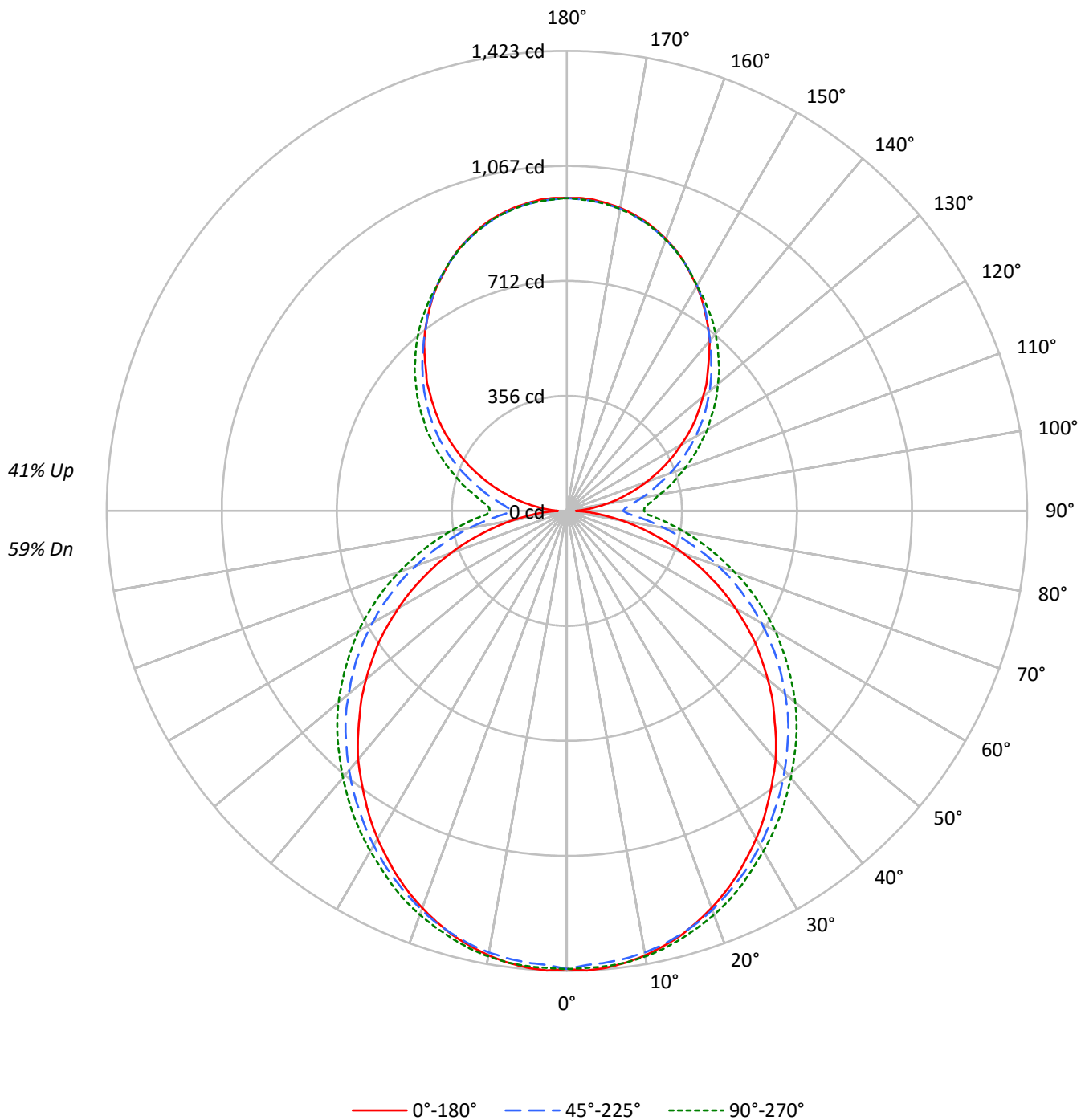
Lumens per Lamp: N/A
Luminaire Lumens: 7518.0 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 84.5
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1033356

CATALOG NUMBER: S124DIW-B1195D770UB27-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65
1	99	94	89	85	92	88	84	80	76	73	70	65	63	61	55	54	52
2	89	81	74	69	83	76	70	65	66	61	57	57	53	50	48	45	43
3	81	71	63	57	75	66	59	54	58	52	48	50	45	42	42	39	36
4	74	63	54	48	69	59	51	45	51	45	40	44	39	35	37	34	31
5	68	56	47	41	63	52	44	39	45	39	34	39	34	31	34	30	27
6	63	50	41	35	58	47	39	33	41	35	30	35	30	27	30	26	23
7	58	45	37	31	54	42	35	29	37	31	26	32	27	23	28	24	21
8	54	41	33	27	50	38	31	26	34	28	23	29	24	21	25	21	18
9	50	37	29	24	46	35	28	23	31	25	21	27	22	19	23	19	17
10	47	34	27	22	43	32	25	21	28	23	19	25	20	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11555	11555	11555
5°	11586	11254	11274
10°	11511	11032	11000
15°	11403	10783	10692
20°	11244	10513	10393
25°	11064	10216	10070
30°	10869	9922	9740
35°	10649	9621	9447
40°	10472	9331	9144
45°	10211	9060	8875
50°	9988	8752	8592
55°	9758	8456	8266
60°	9401	8086	7959
65°	9008	7688	7590
70°	8531	7233	7163
75°	7864	6726	6757
80°	7115	6210	6331
85°	6120	5691	5986

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10211 cd/sqm

TEST NUMBER: P1033356

CATALOG NUMBER: S124DIW-B1195D770UB27-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.3	1.8
10°-20°	384.7	5.1
20°-30°	581.6	7.7
30°-40°	703.7	9.4
40°-50°	743.9	9.9
50°-60°	700.1	9.3
60°-70°	581.0	7.7
70°-80°	407.7	5.4
80°-90°	231.9	3.1
90°-100°	199.9	2.7
100°-110°	290.3	3.9
110°-120°	388.9	5.2
120°-130°	461.6	6.1
130°-140°	492.0	6.5
140°-150°	470.5	6.3
150°-160°	393.0	5.2
160°-170°	261.5	3.5
170°-180°	91.6	1.2
0°-30°	1100.6	14.6
0°-40°	1804.2	24.0
0°-60°	3248.2	43.2
0°-90°	4468.8	59.4
90°-120°	879.1	11.7
90°-150°	2303.2	30.6
90°-180°	3049.0	40.6
0°-180°	7518.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1418	1414	1403	1415	1414	135
15°	1360	1361	1357	1371	1369	383
25°	1244	1254	1258	1276	1277	573
35°	1088	1108	1123	1146	1150	682
45°	908	938	968	995	1003	701
55°	711	744	792	824	833	633
65°	492	543	597	636	649	488
75°	273	332	398	443	457	290
85°	84	151	222	270	286	88
90°	28	99	174	224	238	21
95°	66	125	195	240	254	65
105°	189	221	283	325	340	201
115°	336	350	399	434	444	332
125°	482	480	519	548	556	430
135°	616	621	632	656	663	477
145°	746	748	748	757	761	467
155°	853	853	852	855	852	393
165°	929	926	925	930	926	262
175°	966	962	962	967	962	92
180°	968	968	968	968	968	

TEST NUMBER: P1033356

CATALOG NUMBER: S124DIW-B1195D770UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1423.3	1418.5	1405.9	1417.0	1415.4
5°	1418.5	1413.8	1402.7	1415.4	1413.8
7.5°	1409.0	1405.9	1396.3	1410.6	1409.0
10°	1396.3	1394.7	1386.8	1401.1	1399.5
12.5°	1378.9	1378.9	1374.1	1386.8	1386.8
15°	1359.8	1361.4	1356.7	1370.9	1369.4
17.5°	1334.5	1339.2	1337.6	1351.9	1350.3
20°	1307.5	1312.2	1313.8	1329.7	1329.7
22.5°	1277.3	1283.7	1286.8	1302.7	1305.9
25°	1244.0	1253.5	1258.3	1275.7	1277.3
27.5°	1207.5	1221.8	1228.1	1244.0	1245.6
30°	1171.0	1183.7	1194.8	1212.3	1215.4
32.5°	1131.3	1147.2	1159.9	1180.5	1183.7
35°	1088.5	1107.5	1123.4	1145.6	1150.4
37.5°	1045.7	1067.9	1086.9	1109.1	1113.9
40°	1004.4	1025.0	1047.2	1071.1	1077.4
42.5°	956.8	980.6	1007.6	1034.6	1039.3
45°	907.6	937.8	967.9	994.9	1002.8
47.5°	861.6	891.7	926.7	953.6	963.2
50°	810.8	845.7	880.6	912.4	921.9
52.5°	760.0	795.0	836.2	867.9	877.5
55°	710.9	744.2	791.8	823.5	833.0
57.5°	655.3	696.6	742.6	780.7	788.6
60°	601.4	642.6	695.0	731.5	744.2
62.5°	549.0	595.0	647.4	683.9	696.6
65°	491.9	542.7	596.6	636.3	649.0
67.5°	437.9	491.9	549.0	588.7	601.4
70°	382.4	436.4	496.7	539.5	550.6
72.5°	328.5	384.0	449.0	490.3	503.0
75°	272.9	331.6	398.3	442.7	457.0
77.5°	220.6	282.4	352.3	396.7	412.6
80°	173.0	236.4	306.2	353.8	366.5
82.5°	125.4	192.0	261.8	311.0	325.3
85°	84.1	150.7	222.1	269.7	285.6
87.5°	52.4	117.4	187.2	233.3	247.5
90°	27.6	99.4	173.6	224.1	238.3
92.5°	43.3	108.5	180.5	227.2	240.6
95°	65.5	124.6	194.9	240.0	254.3
97.5°	90.8	142.9	213.9	258.2	272.4
100°	122.3	166.5	235.1	279.4	290.5
102.5°	156.7	192.3	258.6	302.1	315.5
105°	188.7	221.1	282.8	324.8	339.7
107.5°	225.3	253.1	309.3	352.0	362.4
110°	261.2	284.9	339.6	374.6	389.6

TEST NUMBER: P1033356

CATALOG NUMBER: S124DIW-B1195D770UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	298.5	317.5	368.4	403.3	416.0
115°	335.8	350.1	399.4	433.6	443.9
117.5°	372.5	382.0	428.8	460.0	470.4
120°	407.5	415.3	459.1	487.0	501.2
122.5°	445.7	446.5	488.6	518.1	525.4
125°	481.5	480.0	518.9	547.6	555.6
127.5°	515.2	516.0	546.2	573.3	583.6
130°	549.6	550.3	575.7	602.7	609.2
132.5°	586.3	586.2	604.4	630.0	638.7
135°	616.1	620.6	631.7	655.6	662.9
137.5°	651.3	652.0	659.7	681.3	690.1
140°	686.5	686.4	688.0	707.8	715.0
142.5°	717.1	718.6	716.2	733.7	740.0
145°	746.3	747.6	748.4	757.1	761.3
147.5°	776.2	778.3	777.6	778.4	784.0
150°	803.1	804.5	804.5	804.5	803.8
152.5°	827.0	828.5	829.2	831.5	829.2
155°	853.2	853.2	852.4	855.4	852.4
157.5°	875.6	874.1	874.1	876.4	874.1
160°	895.1	894.3	893.6	895.8	892.1
162.5°	913.0	910.8	910.0	914.5	910.8
165°	928.8	926.5	925.0	929.5	926.5
167.5°	941.5	938.5	938.5	943.0	938.5
170°	952.0	948.2	949.0	953.5	948.2
172.5°	959.4	956.4	956.4	961.7	956.4
175°	966.2	962.4	961.7	966.9	961.7
177.5°	969.2	965.4	965.4	970.7	964.7
180°	967.7	967.7	967.7	967.7	967.7

(END OF REPORT)